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ABSTRACT

In the spring of 1970, questionnaires were sent to Deans of Resident Instruction in each of 22 4-year colleges and universities in the U.S., to assess policies on accepting transfer credit in 2-year college agricultural courses by 4-year colleges and universities. It was found that the state universities will generally accept credit, with a few restrictions, in agricultural courses earned in junior and community colleges, but will not accept credit from area vocational or technical schools. Credit in agricultural courses taken in 2-year colleges outside the state will transfer to another state university with fewer restrictions than will credit earned in the same state. Few junior and community college teachers are required to meet any state certification standards. State universities assume that instructors hold masters degrees in the subjects taught. More than half the universities surveyed share course material with junior and community colleges, but only on a request basis. Fifty-five per cent of the Deans of Resident Instruction feel that students experience little or no difficulty in transferring from a 2-year college to a 4-year college. Recommendations based on the above findings are listed. (CA)

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A STUDY OF THE TRANSFER  
POLICIES OF FOUR-YEAR  
AGRICULTURAL COLLEGES IN  
STATE UNIVERSITIES REGARDING  
CREDIT IN AGRICULTURAL COURSES  
TAKEN IN TWO YEAR POST-SECONDARY  
INSTITUTIONS

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by

THE JUCO SUBCOMMITTEE

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LOS ANGELES

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## INTRODUCTION:

In today's world of unrest and uncertainty, transfer students from two-year colleges frequently find their credit in agricultural courses unacceptable or acceptable only if proof can be established that it conforms to the universities' standards. Thus, the "dream" of completing the degree requirements in a four-year period is unrealistic as a result of the rules and regulations of the university. Agriculture remains as an important industry in America today. Although many would downgrade its importance due to the small percentage of citizens engaged in the production phase, few critics have taken into account the vast industrial impact of the industry. The processing of the raw products and the distribution and marketing of those products involves the employment of millions of Americans. Consequently, the agricultural industry needs youth to maintain and expand business in professional-level occupations. In the face of the rising costs of education, it is financially beneficial for students to remain at home or near home to complete a portion of their college education. This hard fact has been one crucial issue for the development of two-year institutions. Yet these students are placed in a most distressing situation when suddenly they find their courses are not transferable or are transferable with some additional provisions. The junior colleges face a perplexing situation with a responsibility to serve the unique educational needs of the community and yet conform to the requirements of the four-year college or university. A factor, not to be overlooked, is the responsibility of the four-year institution to provide society and the "world of work" with an

employee capable of fulfilling the requirements of the job. Between this dicotomy lies a most vital problem facing both the two-year college administration and program-planning personnel and the four-year colleges and universities. At the present time, evidence seems to indicate that no particular state, regional, or national pattern is emerging; and consequently, each institution established their own policies and procedures for accepting credit in agricultural courses taken at two-year institutions. As a result of this situation transfer students with three to a maximum of six agriculture courses earned at two-year colleges frequently face the dilemma of losing all the credit, or not having it apply to a major. They are then required to spend an additional semester or two in the senior college trying to complete the degree requirements. With costs of education soaring, this poses as a most serious problem for students as well as the two-year and four-year colleges.

With this situation clearly evident, a committee at the University of Nebraska was requested to prepare proposals for faculty consideration regarding the acceptance of transfer credit in agriculture. To prepare these proposals, the committee felt it was necessary to survey four-year institutions from across America. Thus, a total of 22 four-year institutions were surveyed and a 100 percent return was received.

### THE PROBLEM

The objective of the study was to assess the policies for accepting the transfer credit in agricultural courses by four-year college and universities.

A questionnaire was developed which was designed to obtain specific responses to questions regarding: 1) teacher certification, 2) acceptance of two-year college courses in agricultural subject matter within the state and outside of the state, 3) subject matter and degree requirements of two-year

college teachers before acceptance of credit, 4) the performance of two-year college students as compared to those who spend all of their time at the four-year college, and 5) the influence of the four-year college on the curriculum of the two-year college. These five questions were directed to the Deans of Resident Instruction in each of the 22 four-year colleges and universities. The five questions were also directed at transfer credit for agricultural subject-matter courses taken in junior colleges, area vocational-technical schools, and community colleges. The study was conducted in the spring of 1970. The survey questionnaire was mailed to each Dean of Resident Instruction and returned via a self-addressed stamped envelope.

### THE FINDINGS

The data was placed in three categories to provide an opportunity to observe differences in the manner of accepting two-year college credit in agricultural courses by four-year colleges. These categories provided an opportunity to observe similarities or dissimilarities of acceptance of credit among the various four-year institutions. The following schools were included in the study:

#### North Central Regional Universities

1. University of Illinois, Champaign
2. University of Southern Illinois, Carbondale
3. The Ohio State University, Columbus
4. Purdue University, Lafayette
5. South Dakota State University, Brookings
6. North Dakota State University, Fargo
7. University of Wisconsin, Madison
8. Kansas State University, Manhattan
9. Michigan State University, East Lansing
10. University of Missouri, Columbia
11. Iowa State University, Ames
12. University of Minnesota, St. Paul
13. University of Nebraska, Lincoln

### Other Universities

1. Cornell University, Ithaca
2. Texas A & M University, College Station
3. Texas Tech University, Lubbock
4. Louisiana State University, Baton Rouge
5. Mississippi State University, State College
6. Colorado State University, Fort Collins
7. University of Wyoming, Laramie
8. Oklahoma State University, Stillwater
9. University of California, Berkeley

The data in Table I presents an indication of the certification requirements for teachers in two-year post-secondary schools. It may be noted that in the junior college and community college areas relatively few states require teaching certificates. There seemed to be some indication that, in general, teachers in area vocational-technical schools were subject to teacher certification more frequently than in other types of institutions. Of the 22 state universities surveyed, 13.6 per cent indicated certification requirements for the teachers in junior colleges, 9.1 per cent for the teachers in community colleges, and 22.7 per cent for the teachers in vocational-technical schools.

TABLE I\*

### TWO-YEAR POST-SECONDARY COLLEGES THAT OPERATE UNDER STATE CERTIFICATION REQUIREMENTS FOR TEACHERS

Type of	North Central States		Other States		(22) Total					
	Yes	No	Yes	No	Yes	Per Cent	No	Per Cent	No Opinion	Per Cent
Junior College	3	6	0	6	3	13.6	12	54.6	7	31.8
Community College	2	7	0	7	2	9.1	14	63.6	6	27.3
Area Vo-Tech School	5	7	0	7	5	22.7	14	63.6	3	13.6

\*Due to rounding, percentages may be higher or lower than 100.0%

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Comments: (Table I)

- Vocational-technical schools must meet Board of Regents standards to have their program approved to meet certain minimal standards of training.
- These colleges are approved by the Higher Board of Regents. New or revised curricula are inspected and approved by committees of the Higher Board.
- Certification is not a state requirement but certain schools may require certification.
- Only those teachers in vocational-technical areas must possess teaching certificates.
- Vocational technical teachers meet state certification requirements at the secondary level or are given temporary certificates based on job experience.
- Teachers must fulfill teacher certification requirements for secondary or junior college levels.
- The State Department of Education has a flexible policy of requirements for certification of Vocational-Technical School personnel. At least two years of college education is sought, but more important is the industrial-business background and teaching potential of candidates for certification. The Junior State Colleges use similar criteria for certifying staff members for terminal courses. A Masters degree is requested for teaching academic courses.
- Teach on temporary certificate.

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Table II presents information concerning the State Universities' acceptance of credit in agricultural subject-matter courses earned at two-year post-secondary schools within their state. The 22 State Universities stated that 72.7 per cent would accept agricultural credit earned at junior colleges, 63.6 per cent would accept community college credit, and 27.3 per cent would accept agricultural credit from area vocational-technical schools.

TABLE II  
STATE UNIVERSITIES INDICATING ACCEPTANCE OF CREDIT  
IN AGRICULTURAL SUBJECT-MATTER COURSES  
EARNED AT TWO-YEAR COLLEGES  
WITHIN THEIR STATE

Type of Institution	North Central Universities		Other Universities		(22) Total					
	Yes	No	Yes	No	Per Yes	Per Cent	Per No	Per Cent	Per Opinion	Per Cent
Junior College	9	2	7	0	16	72.7	2	9.1	4	18.2
Community College	7	3	7	0	14	63.6	3	13.6	5	22.7
Area Vo-Tech School	4	9	2	6	6	27.3	15	68.2	1	4.5

Comments:

- Credit is given if a similar course is given on our campus at the freshman or sophomore level. However, various Ag College departments offering B.S. degrees aren't obligated to grant credit for courses transferred towards a B.S. degree. Presently, a committee is working on a core curricula that will transfer to all institutions that offer a B.S. in agriculture.
- We use the same requirements to evaluate these courses as we use to evaluate Junior College courses.
- Evaluation is done within departments of the Ag College. Departments are instructed to study course outlines and content of courses before accepting credit. Departments are familiar with the Junior colleges and know the instructors involved so that accepted courses are comparable to those at the University.
- Courses which have been developed in cooperation with the appropriate departments on our campus are accepted. Courses which are specifically offered for the junior college terminal (applied) student are not accepted. There is a "gray" area between these two positions which has caused us some concern, hence we are in the process of developing a policy statement on this subject.
- The courses are compared to our own and evaluated-there are five Junior Colleges under our Board whose courses parallel our own. Instructors work with the Jr. College people to make courses similar in content. No agriculture courses are offered at the community college level.



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Comments: (cont. for Table II)

- Junior Colleges are restricted to offering courses taught at the Freshman and Sophomore level. Coordination board for state universities and colleges is developing a freely transferable core curricula for agriculture.
- Admission to the University, and credit granted from Jr. Colleges is determined by the Admissions Office. We will accept any credit thus given, in fulfillment of the requirements for the bachelor's degree.
- The Community Colleges use the College of Agriculture course outlines and texts for the Ag courses. Other courses in Ag subject matter at two-year colleges that aren't taught in the Ag College are accepted as elective credit only.
- The student is accepted and final determination of his transfer credits is held until the student has academically proven himself.
- College must be accredited and for credit the courses are evaluated on their similarity to our sources: outline, labs, books, exams. Certain courses are used as elective credit only. Transfer students may win credit in equivalent courses by written or oral exam.
- Agricultural courses at other institutions are virtually nonexistent. If any, we treat them the same as other transfer credit.
- Instructors must have a Masters degree in the subject-matter field and the course must be "transfer" rather than "technical." Recently we approved two courses from one college where the instructor doesn't meet the requirements, but has worked with our staff to develop the courses.
- Only accept Liberal Arts College parallel courses from two technical colleges. The two institutions are North Central accredited and our English, Speech, etc. departments have found acceptable for transfer comparable courses taught at these schools. If a question arises provision credit or credit by exam can be used.
- Staff competence as evidenced by North Central accreditation.
- We have a working agreement with one or two community colleges from which we accept credit.
- Students are permitted to take proficiency exams in order to get credit.
- Five courses were approved for transfer credit by the state agriculture articulation conference. One-half of total credit can be used for agriculture electives in majors permitting this much flexibility.
- Bachelor level courses are accepted while courses from vo-tech schools are sometimes transferred.

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Comments: (cont. for Table II)

- Since we have a Tech. Institute, we can say that "we don't accept credits from our institute and we will not accept credits from yours."
- College courses are given credit upon examining their content and objectives. Whether they are or aren't used in the major they are given transfer credit. A subcommittee of the Curriculum Committee working with the adviser and department aid in determining the use of the hours in the major.
- Transfer credit is given upon review of course description, outline, tests, visits, and grade of "C" or 7.0.
- Only for courses which experience with comprehensive validation examinations have proved to be approximately equivalent to the same course as taught at the University. If the instructor has an M.S. in the field we would accept this.

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A review of the table reveals that credits in agriculture earned at the are vocational-technical schools was not as readily acceptable as that earned in the junior and community colleges. Evidence seems to indicate relatively few differences in accepting agricultural credit between the "North Central Region Universities" and "Other Universities". A review of the comments and the raw data indicated that despite acceptance of agricultural credit, a number of Universities accepted credit with certain restrictions. Thus, Table III was designed to reflect those universities that accepted agricultural credit from two-year post-secondary schools without restrictions such as validation examination, proof of performance or teacher qualifications.

TABLE III

STATE UNIVERSITIES INDICATING ACCEPTANCE OF CREDIT  
IN AGRICULTURAL SUBJECT-MATTER COURSES  
WITHOUT RESTRICTIONS\* EARNED AT  
TWO YEAR COLLEGES WITHIN THEIR STATE

Type of Institution	North Central Universities		Other Universities		(22) Total			
	Yes	No	Yes	No	Per		Per	
					Yes	Cent	No	Cent
Junior College	4	7	6	3	10	45.4	10	45.4
Community College	3	9	3	4	6	27.3	13	59.1
Area Vo-Tech School	1	12	1	7	2	9.1	19	36.4

\*Without restrictions refers to the necessity of transferring students to take validation examinations and proving their academic record. It does not refer to a maximum of 66 semester hours, or grades of "C" or less. It also refers to agricultural courses only.

Comments:

- All courses taught in agriculture are accepted with the exception of animal science courses. The Vo-Tech schools do not offer work of the quality necessary for college credit.
- We will accept any credit determined by the Office of Admissions.
- There are five Junior Colleges under our board and our own instructors work with the Juco's to make our courses similar.
- All two-year colleges are community colleges, and they use the College of Agriculture course outlines and the same textbooks for their courses. If they teach an agricultural course not taught in the College of Agriculture it is accepted as elective credit only.
- Courses which have been developed in cooperation with the appropriate departments on our campus are accepted.
- Agricultural courses in Jucos and Community Colleges are virtually non-existent. If any, we treat them the same as other transfer credit.
- Five Juco courses have been approved for transfer credit in Illinois. This approval was made by the state articulation conference in agriculture in Illinois. One-half of the total credit from a Vo-Tech school can be used for agriculture electives and free electives where majors have this much flexibility at S.I.U.

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Comments: (cont. for Table III)

- Baccalaureate level courses transfer without question.
  - Students take an agriculture core course for three semesters which includes introduction to Agricultural Economics, Animal Science, Plant or Crop Science, Forestry, Soil Science, Agriculture Mechanization.
  - A minimum grade of "C" or 70 is the only restriction.
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The data in Table III disclosed State Universities which seemed to the investigators to accept credit in agricultural subject-matter courses earned in two-year post-secondary institutions without apparent restrictions. A comparison of the data in Table II and Table III reveals some rather definite changes in the acceptance of transfer credit in agriculture.

In the case of the junior colleges, it may be observed that 72.7 per cent of the universities accept transfer credit, however 45.5 per cent accept the transfer without restrictions such as validation examinations, or the establishment of a record at the university. The difference is even more pronounced in the community college situation in which 63.6 per cent of the universities stated they would accept transfer credit in agriculture, however, Table III reveals that only 27.3 per cent would accept the credit without restrictions. The comparison of area vocational-technical schools in Tables II and III seems to suggest that state universities do not readily accept transfer credit in agriculture from these institutions.

A comparison of the "North Central Region" universities and the "Other" universities reveals that four of eleven North Central Universities accept two years of transfer credit with courses in agriculture without restrictions, whereas six of nine "Other" universities accept credit in agriculture without restrictions such as validation examinations, and establishing a satisfactory grade point average before extending credit in agricultural courses.

Table IV presents data concerning the acceptance of credit by state universities for credit earned in agricultural courses in out-of-state, two-year, post-secondary institutions. It may be noted in the Table that out-of-state students fare as well as, and possibly better than, instate students. A comparison of the data in Tables III and IV reveals that in general, transfer students with credit in agricultural courses have greater acceptance of credit than those who transfer to the state university from within the state. The typical comments received in response to the questions seemed to indicate that possibly the registrars office at any out-of-state university is consulted before accepting credit. Consequently, the degree of scrutiny given the credits in various agricultural courses may not be as severe as those of instate transfer students.

TABLE IV  
STATE UNIVERSITIES INDICATING A DIFFERENT POLICY FOR  
ACCEPTING CREDIT IN AGRICULTURAL COURSES TAKEN IN  
TWO-YEAR OUT-OF-STATE INSTITUTIONS AS COMPARED  
TO THE POLICY FOR IN-STATE INSTITUTIONS

Type of Institution	North Central Universities		Other Universities		(22) Total				
					Per		Per		No Opinion
	Yes	No	Yes	No	Yes	Cent	No	Cent	
Junior College	7	5	4	3	11	50.0	8	36.4	3
Community College	8	5	3	3	11	50.0	8	36.4	3
Area Vo-Tech School	4	9	4	3	8	36.4	12	54.6	2

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Comments: (Table IV)

- We ask the Land Grant College of the State for recommendation on advance standing credit.
- Only difference is that we examine the course content, etc. more carefully.
- Our intent is to be consistent but we may have been more demanding of our in-state transfer students than we have been to those outside of Kansas.
- We accept what the Land Grant School of the other state will accept, plus a validation exam.
- We refer to Ag College of Land Grant School of the other state for their policy of credit transfer.
- Follows policy of state in which credit is earned.
- Credit is accepted commensurate with the policy established by the Land Grant College in the State of origin.
- We follow recommendations of the Land Grant institution of that state.
- We check with the Land Grant Institution in the state and follow their recommendation.
- We follow the other state's Land Grant Institution recommendations.
- Does not apply, but accept credit from out-of-state junior colleges on an individual basis.
- We follow the rules of the Land Grant Institution from the state in which the junior college is located.
- Do not have the same agreement for the five courses we have within the state.
- We accept credit from accredited colleges.
- We depend upon recommendations and policy of state University Ag College is located in.

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The data in Table V reveals a comparison of the number of colleges of agriculture in state universities that require the teachers in two-year post-secondary institutions to hold a Masters degree in the specific agricultural subject-matter area taught before accepting credit without requiring a

validation examination. It may be noted that relatively few state universities have this requirement. Many institutions indicated they assumed the instructors held Masters degrees in specific subject-matter areas.

TABLE V

STATE UNIVERSITIES REQUIRING TEACHERS IN TWO-YEAR POST-SECONDARY COLLEGES TO HOLD A MASTERS DEGREE IN THE SPECIFIC AGRICULTURAL SUBJECT MATTER TAUGHT BEFORE CREDIT WILL BE ACCEPTED WITHOUT STUDENTS TAKING A VALIDATION EXAMINATION.

Type of Institution	North Central Universities		Other Universities		(22) Total					
	Yes	No	Yes	No	Yes	Per Cent	No	Per Cent	Opinion	Per Cent
Junior College	2	5	1	5	3	13.6	10	45.4	9	40.9
Community College	3	5	1	5	4	18.2	10	45.4	8	36.4
Area Vo-Tech School	0	7	0	5	0	00.0	12	54.6	10	45.4

Comments: (Table V)

- No, but all hold a Masters degree due to competition for employment, hence, not a factor in course evaluation.
- It is assumed instructors will have a Masters before they undertake instructional activities. In a number of instances the M.S. is in Agricultural Education, not in specific fields. We do not disagree with this practice as this degree is very useful in this situation.
- The problem seems to be that teachers have a Masters degree in Agricultural Education and teach an array of courses. This matter is being discussed among our Junior Colleges and four-year colleges and universities.
- There is no requirement but most of them have at least a Masters degree.
- Though some express this view, our policy statement will probably not include this requirement

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Comments: (cont. for Table V)

- There are exceptions and more have taught without in past, but M.S. people are also teaching outside major area.
  - Texas College and University system is developing a freely transferable core curricula.
  - Not required but all agriculture instructors except one has at least a Masters degree.
  - Not necessarily.
  - In general, instructors must have a Masters degree in the specific subject matter field. In general it must be transfer rather than technical. We do approve courses taught by instructors without masters if he has worked with counterparts at University.
  - Decided by the junior college administration.
  - Not required, it is a stated goal of the Junior College Board.
  - No, but there should be such a requirement.
  - In Vo-Tech schools we don't accept any credit yet.
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One of the primary concerns in this investigation was to obtain a general assessment of the opinions of agricultural college Deans of Resident Instruction regarding the ability of transfer students to enter advanced-level agricultural courses without difficulty, after taking the beginning-level courses in the two-year post-secondary institutions. Table VI indicated that more than half of the state universities stated that junior college and community college students could transfer, without particular difficulty, to the colleges of agriculture at state universities. Even though a sizeable number of state universities would not answer the question directly, it may be noted that few felt the transfer students would experience difficulty. The typical comments pointed out that frequently G.P.A.'s dropped from .5-1.0 points. However, some recovery was also noted and with some individual selection procedures it seemed that transfer students in



agriculture were not generally placed at a distinct disadvantage. Further examination of the table also reveals that transfer students from Vo-Tech schools do experience difficulty when transferring to the college of agriculture, however, a majority of the schools indicated they have no information available on the capabilities of these students.

TABLE VI

OPINIONS OF AGRICULTURAL COLLEGE DEANS OF RESIDENT INSTRUCTION  
REGARDING THE TWO-YEAR COLLEGE TRANSFER STUDENTS ABILITY TO  
ENTER ADVANCED LEVEL AGRICULTURE COURSES WITHOUT DIFFICULTY.

Type of Institution	North Central Universities		Other Universities		(22) Total					
	None*	With**	None	With	None	Per Cent	With	Per Cent	Info.	Per Cent
Junior College	6	2	6	0	12	54.6	2	9.1	8	36.4
Community College	6	2	4	0	10	45.4	2	9.1	10	45.4
Area Vo-Tech School	0	4	1	1	1	4.5	5	22.7	16	72.7

\*None equals no difficulty

\*\*With equals having difficulty.

Comments: (Table VI)

-In the past the University has experienced a .6 G.P.A. drop. In agriculture we found a .45 drop with a .2 recovery later.

-No difficulty if course is taught well.

-Generally at some slight disadvantage.

-No difficulty provided the basic science courses which also serve as prerequisites have been completed.

-This depends more on the individual student than upon the institution.

-Considerable variation exists among colleges and subject matter areas.

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Comments: (cont. for Table VI)

- If the student is properly prepared in the basic courses in Math and Chemistry, no difficulty.
- Vo-Tech students usually do not pass--our records indicate Juco transfers G.P.A.s drop 0.5 to 1.0 grade points. This is true for agriculture courses, Chemistry, English, etc.
- Variations in individual students, 60% do not have difficulty, 40% have some difficulty.
- No difficulty when subjects have been developed in cooperation with our College departments.
- Many of the top students are Junior College transfers. The average transfer student does about as well as the student that started at the University.
- As measured by academic performance, there is no difference at the junior and senior level between transfer students and native students in the College of Agriculture at Texas A & M University.
- Our experience with the Junior College transfers bringing in work in agriculture is uniformly excellent. They are, of course, self-selected, and enter with records of academic success. We are very pleased with our transfers from Austin, Worthington, and Willmar State Junior Colleges.
- All students drop .5 to 1.0 in successive courses, hence a safety factor is involved in admissions selection to insure the transfer students survive here.
- Acceptance of two-year college credit is no longer a problem. We have a backlog of experience which indicates that a student with a "B" record can do a creditable job in a reasonable program as long as he has practical experience to support the academic.

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Examination of the data in Table VII points out the number of state universities which provide each Junior College in their respective states with lists of course outlines, references and textbooks used in beginning agricultural courses at their university. The table discloses that generally state universities do share their course materials with junior colleges, however, they seem to proceed on a request basis. Although a great deal of variation exists, it seems that universities in the North Central Region are more

reluctant to share course outlines and teaching materials than the "Other Universities" surveyed in this study. The extreme positions taken on this point ranged from statements such as "We encourage Junior Colleges to leave agricultural training to us." to "The relationship to Junior Colleges teaching agriculture is a fine one. Regular visits and conferences keep the programs in step with changes at the university. The relationship works to the advantage of the Junior College and the University."

TABLE VIII

NUMBER OF STATE UNIVERSITIES WHICH PROVIDE EACH JUNIOR COLLEGE  
A LIST OF COURSE OUTLINES, REFERENCES AND TEXTBOOKS USED  
IN BEGINNING AGRICULTURAL COURSES AT THE UNIVERSITY

Type of Institution	North Central Universities		Other Universities		(22) Total				
	Yes	No	Yes	No	Per Yes	Per Cent	Per No	Per Cent	Per Opinion Cent
Junior College and/or Community College	6	4	7	0	13	59.1	4	18.2	5 22.7

Comments: (Table VII)

- We encourage Junior Colleges to leave agriculture teaching to Iowa State.
- Annual Articulation Conference of State and Junior Colleges Committee of Junior and Senior College teachers within a subject settle on hours, outline, text, etc. We hold refresher in-service courses for Juco teachers. We have settled on beginning courses in Ag Econ, Soils, Crops, An Science, and Mech. Ag.
- We do not have Jucos offering agriculture, however, a small liberal arts college offers nine courses and every two year we meet with them and exchange syllabi until our courses are equivalent.
- If they want material we send it but not as a routine matter. Once each year we meet with representatives from these schools and we generally find them anxious to explore areas of mutual interest and we try to have some understanding on the transfer issue.

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Comments: (cont. for Table VII)

- Yes, upon request. Faculty of Jucos and the University are encouraged to visit with each other. Plans are underway to formally organize a program through a "State Association of College Teachers in Agriculture" which would meet annually on a campus of one of the schools offering agricultural courses.
  - Besides sending material, visits are made to the colleges to discuss agricultural programs and changes made in the College of Agriculture's program of study.
  - Personal contact, university mailings.
  - Close working relationship with the Jucos and the State Colleges teaching agriculture.
  - Yes, if requested. We have cooperated with Jucos in developing transfer courses. We have "cautiously" encouraged Jucos to offer this type of work and have not "pushed" this on to them. We cooperate fully if the local administration desires to offer agriculture courses.
  - The relationship to Junior Colleges teaching agriculture is a fine one. Regular visits and conferences keep the programs in step with the changes at the University. The relationship works to the advantage of the Junior College and the University.
  - If students request copies.
  - We do not suggest that they should "duplicate" our courses. We encourage them to build courses to meet their own objectives. However, we also encourage instructors at the Junior Colleges to visit our campus and work with our instructors. Our relationships are cordial, and I believe mutually enjoyed.
  - Do so by request. A full time staff member in the Office of Resident Instruction visits each two-year college in the state for purposes of smoothing relationships. He visit each department, arranges for conferences, collects course work data, recruits, interviews, admits transfer students, evaluates course work, awards advanced standing, serves as transfer student counselor and advisor.
  - We are developing more contacts, but have not formalized our relationships yet.
-

### THE SUMMARY

In a summary of the results of the present investigation, evidence seems to indicate that relatively few junior and community college teachers are required to meet any state teacher certification standards. There was an indication that about 23 per cent of the states surveyed had certification requirements for teachers in post-secondary vocational-technical schools.

A review of the data further reveals that the sample of universities included in the study generally accept credit in agricultural courses earned in junior and community colleges and do not accept credit in courses earned in area vocational-technical schools. Evidence also shows that credit is not accepted without restrictions such as validation examinations, or proof of performance after establishing a record, or reviewing the post-secondary schools teacher qualifications. North Central universities tended to be more reluctant than other selected universities in accepting agricultural credit without restrictions. The trend appeared to be that agricultural credit accepted without restrictions most frequently from junior colleges and almost no credit was accepted from area vocational-technical schools.

It may also be noted that credit in agricultural courses taken in two-year post-secondary institutions outside the state will generally transfer to another state university with fewer restrictions than credit earned in agriculture at institutions within the same state. Generally state universities do not require the post-secondary teacher to hold a masters degree in the subject-matter area being taught. However, a review of the comments seems to indicate that state universities assume that instructors do hold masters degrees in the subject being taught.

In regard to the two-year college transfer students ability to enter advanced level agricultural courses without particular difficulty, the survey seemed to indicate that about 55 per cent of the Deans of Resident Instruction

felt that students with agricultural credit from junior colleges would experience no difficulty, another 36 per cent had no opinion and only nine per cent felt they would have difficulty in advanced agricultural courses at the state university. This same issue was about the same for community colleges. However, 73 per cent of the Deans had no opinion regarding students' ability to proceed from area vocational-technical schools.

About 60 per cent of the state universities indicated they provide junior colleges and community colleges with a list of course outlines, references and textbooks used in similar courses taught on the university campus. Another 18 per cent indicated they did not provide such a list and 22 per cent had no opinion on the question.

#### THE RECOMMENDATIONS

The investigators would like to make the following recommendations in view of the comments and responses received in the study:

1. It is recommended that the universities' College of Agriculture provide administrators and instructors in junior colleges copies of course outlines, textbooks and references and course examinations to post-secondary institutions planning to teach agricultural courses.
2. It is recommended that an annual Articulation Conference be held by the College of Agriculture for post-secondary institutions interested in offering agricultural courses for transfer credit.
3. It is recommended, in light of the generalization that junior college grades are generally .5 to 1.0 points lower than the university average, that the College of Agriculture accept all credit in agricultural courses with a "B" grade or higher. These courses would be limited to those that are introductory in nature.
4. It is recommended that agricultural courses taken in the two-year post-secondary school, which is a prerequisite for an advanced course, be accepted without restrictions providing the student has earned a "B" grade or better.
5. It is recommended that the College of Agriculture assist two-year post-secondary institutions in course planning and recruitment and utilize these institutions as sources of students so that the College of Agriculture may continue to supply the agricultural industry with professional personnel.

6. It is recommended that the College of Agriculture develop flexible requirements to allow students to transfer with as much ease as is possible.
7. It is recommended that the College of Agriculture refrain from dictating to the two-year post-secondary institutions what and how they should teach. These institutions have unique functions and purposes and are designed for their communities. Consequently, the College of Agriculture should cooperate and assist but not dictate policy and program.
8. It is recommended that the College of Agriculture recognize the merits of good teaching by two-year post-secondary instructors and refrain from passing judgement on qualifications by merely examining the type of degrees held by the teacher. Rather, evaluate post-secondary teaching in terms of what students can do as a result of the educational experience.